

Clean Versions of Replacement Claims

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Please cancel claims 23-33 without prejudice and add new claims 34-44 to conform to the following clean versions.

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34. A magnetic memory, comprising:

magnetic memory cell including a sense layer having an easy axis;

keeper structure for applying magnetic fields using exchange coupling to a pair of edge regions of the sense layer that force magnetizations in the edge regions to have a substantially similar direction which is substantially perpendicular to the easy axis of the sense layer, the keeper structure having a proximity to the sense layer which provides a flux closure path between the edge regions.

35. The magnetic memory of claim 34, wherein the flux closure path between the edge regions prevents overall magnetization in the sense layer from straying from parallel and antiparallel orientations with respect to the easy axis of the sense layer.

36. The magnetic memory of claim 34, wherein the keeper structure has an easy axis which is substantially perpendicular to the easy axis of the sense layer.

37. The magnetic memory of claim 34, wherein the keeper structure has a U-shape including a pair of surfaces that overlap the edge regions and which are exchange coupled to the sense layer.

38. The magnetic memory of claim 34, wherein the keeper

structure is formed from a permeable ferromagnetic material having an easy axis which runs along a length of the keeper structure in a direction substantially parallel to the edge regions.

Sub D1 / 39. The magnetic memory of claim 34, wherein the structure encases a conductor that provides read and write access to the magnetic memory cell.

40. The magnetic memory of claim 34, further comprising a reference layer and a tunnel barrier between the sense layer and the reference layer of the magnetic memory cell.

C1 41. The magnetic memory of claim 40, wherein the keeper structure is adjacent to the sense layer.

42. The magnetic memory of claim 40, wherein the magnetic memory cell has substantially square outer dimensions.

43. The magnetic memory of claim 34, wherein the keeper structure is formed from a hard ferromagnetic material.

D 44. The magnetic memory of claim 43, wherein the hard ferromagnetic material is magnetized in a direction substantially parallel to the edge regions.